Infrared Trail Hunting Camera
GC-002

User Manual

Content

1. Quick instruction:

The GC-002 series hunting camera has substantially increased the total time of shooting video. The structure was further improved around the battery case. It is the basic principle of the pyroelectric infrared sensors (PIR) to respond to infrared signals of animals or the human body where an automatic trigger takes photos or video.

1.1 Features

● 12MP/8MP/5MP /3MP/1MP quality photo options

● 1280 x 720P/D1/VGA/QVGA video

● About 1 second trigger time

● 2.36 TFT color screen preview function

● Photo + video feature takes a photo before shooting video

● Pair of regional remote sensors activate the camera and immediately takes a picture of an object entering the lens range

● The day or night mode auto-switch takes the color photos in the day and black and white at night

● Low standby current, lengthy standby time, and a waterproof shell for longer working time in the field

● Low operation temperature; lowest temperature is -22°F

● Runs on a minimum of 4 AA alkaline batteries. The back panel takes 4 AA batteries

as an additional power to last longer in the field

● The IR LED's distance；65 ft or 20m

● Period force shooting （Time Lapse） for observing cold blooded animals,

vegetation, or landscape changes

● Letters and numbers can be entered to set the serial number of camera. The serial number can then be printed onto the photographs. A 4 digit combination can be applied to record the location of the photos

● Date, time, temperature, and moon phase can be imprinted in every photo

● Set up a password to protect your camera from unauthorized users

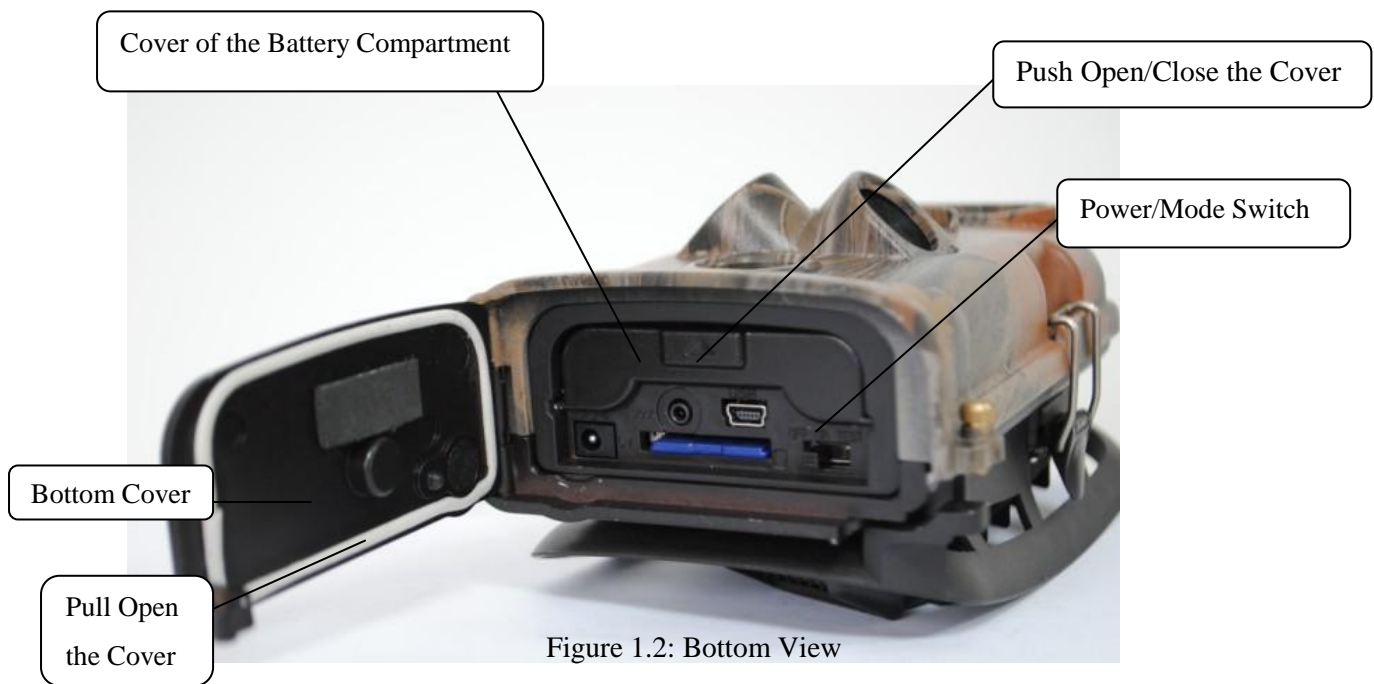● Support the camera with a tripod

1.2 Application area

- ● Hunting camera

- ● Observing animals

- ● Observing human activity

1.3 Diagram

- ● Figure 1.1：Front View

- ● Figure 1.2：Bottom View

- ● Figure 1.3：Back View

LED IR Flash

Motion Indicator

Light Sensor

Lens

Prep PIR Sensor

Main PIR Sensor

Lock Hole

Figure 1.1: Front View

Cover of the Battery Compartment

Push Open/Close the Cover

Power/Mode Switch

Bottom Cover

Pull Open
the Cover

Figure 1.2: Bottom View

The camera will provide: USB 2.0, TV OUT, external 6V power socket, SD cassette, tri-location toggle switch (OFF, ON, TEST)
The camera holds 4 AA batteries; Highly recommend adding the back battery box with 4 AA batteries for a longer working time

LCD Screen

Keypad

Lock Buckle

Additional
Battery Box

Hand Screw

Figure 1.3: Back View

2. Quick Start

2.1 Inserting the Batteries

Insert 8 AA batteries into the additional back battery box and camera body. The battery cover tips to ensure correct polarity of the batteries. Connect the 6V power supply by an external access to electrical outlets. (Optional) Pay attention to the maximum current if the power supply needs more than a 1A (6 V) battery.

2.2 Inserting the SD Card

This camera supports 8MB~32GB SD cards. It is better to format the SD card with this camera. Make sure the SD card is fully inserted or the camera will sound and then shut down.

Insert the Card Upward
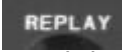
2.3 Test Mode

Moving the switch to the TEST position will set camera to the preview testing mode. When the device is in this mode, you can manually take pictures, videotape, view existing photos and videos and adjust the parameters just like using an ordinary camera. You can also test the PIR (Pyro-electric Infrared) function by the following operations: First, make sure the camera is in preview test mode by looking at the position of the switch, and then, in the range of 3 to 20 meters (10 to 65 feet), walk slowly back and forth along the direction that is exactly perpendicular to the camera lens. If the red LED indicator light flashes, it shows that the position can be sensed by "take PIR", and if the blue LED indicator light flashes, it shows that the position can be sensed by the "prepare PIR" on the left and right.

There are three scenarios in the preview testing mode: 1) the preview mode, where you can see the scenes directly in front of the camera lens from the TFT LCD screen or TV, 2) the setting mode, where the menu is shown, and 3) the playback mode, where you can view existing photos and videos that are stored in the SD card on the TFT LCD screen or the TV. The camera automatically enters preview mode when it is first set in the preview testing mode.

The keys [video icon], [photo icon] symbolize "shoot video" and "take photo", and they are shortcut keys. When used under the preview mode, [video icon] will lead you to video condition, [photo icon] leads to photo condition, and when the key SHOT is pressed, a photo or video is taken, and REPLAY is pressed, photos and videos can be reviewed. The key [left arrow] zooms into pictures under preview condition and the key [right arrow] zooms out. The key [up arrow] plays the first photo and the key [down arrow] plays the next under play view condition.

2.4 Infrared Shooting Mode

Moving the switch to the ON position would set the device in the *Automatic Infrared Shooting Mode*. There is a waiting time of about 10 seconds before the system adjusts to this mode. During this period, the red LED indicator light will keep flashing. After that the light extinguishes, the camera can start taking pictures by infrared inducement. Once the device is in this mode, there will be no need for any manual operations. The camera will function automatically by taking pictures or videotaping the subjects such as animals, persons, or cars that enter the camera sensor range. If you want to shoot according to your own idea, please read the advanced settings.

The infrared camera saves power by closing the lens and activating only when the PIR sensors detect movement. The GC-002 camera needs about 1 second after detection to take photographs. The side sensors help detect animals that may be moving quickly across the camera detection range. The total scope of the sensors is $100 - 120^o$ while the lens itself provides a 51° angle.

3. Advanced Settings

The GC-002 trail camera comes with preset manufacturer settings. You can change the settings to meet your requirements. Please make sure the camera is in the test mode.

3.1 Function Keys

Press "MENU" key to OK/exit the menu. Press ▲ and ▼ to move the markers, ◄ and ► to change the settings, and OK to confirm the change. Always remember to press **OK** to save the changes or new settings will be lost.

Parameter	Settings (**Bold** = default)	Description
Mode	**Camera**, Video, Camera + Video	Select whether still photos or video clips are taken. In Camera + Video mode, the GC-002 can take photos first and then shoot videos afterward.
Format	OK	All files will be deleted after formatting the SD card. Highly recommend you format the SD card if it has been previously used in other devices. *Caution: make sure wanted files on the SD card have been backed up first!*
Photo Size (affects still photos only)	1MP，3MP，**5MP**，8MP，12MP	Select desired resolution for still photos from 1 to 12 megapixels. Higher resolution produces better quality photos, but creates larger files that take more of the SD card capacity. Larger files require longer time to write to the SD card, which will slightly slow the shutter speed. **5MP** is recommended.

Video Size (affects video clips only	**1280*720P** D1 VGA QVGA	Select video resolution (pixels per frame). Higher resolution produces better quality videos, but creates larger files that take more memory on the SD card. **640×480** is VGA mode in standard 4:3 format.
Set Date/Time	**OK**	Press **OK** to set up date and time.
Picture No. (affects still photos only)	**01 Photo**, 02 Photos, 03 Photos	While in Camera Mode, select the number of photos taken in sequence per trigger. Please refer to the Interval Parameter.
Video Length (affects video clips only)	**Avi 10s**, optional from 1s to 60s	Videos are in AVI format and can be played back on most video players.
Interval	**1 Min**, optional from 1S to 60M	Select the shortest length of time that the camera will wait until it responds to any subsequent triggers from the PIR sensor after a game is first detected. During the selected interval, the camera will not take pictures/videos. This prevents the SD card from filling up with too many redundant images.
Sense Level	**Normal**, High, Low	Select the sensitivity of the PIR sensor. The High setting suits indoors and environments with little interference, while the Normal/Low suits outdoors and environments with more interference. Temperature also affects the sensitivity. The High setting is suitable when the ambient temperature is warm while the Low setting is helpful in cold weather.

Date Stamp (affects still photos only)	**Off**, Date, Date/Time	Select **On** if you want the date & time imprinted in every photo.
Timer	On ,**Off**	Select **On** if you only want the camera to work within a specified time period every day. For instance, if the starting time is set at 18:35 and the ending time at 8:25, the camera will function from 18:35 the current day to 8:25 the next day. Outside the time period the camera will not be triggered or take photos/videos.
Password Set	**Off**, On	Set up a password to protect your camera from unauthorized users.
Serial No.	**Off**, On	Select **On** to assign a serial number to each camera you have. You can use the combination of 4 letters and/or numbers to record the location in the photos (e.g.YSP1 for Yellow Stone Park). This helps multi-camera users identify the location when reviewing the photos.
Time Lapse	**Off**, On	If set to **On**, the camera will automatically take photos/videos according to the set interval, regardless of whether the PIR sensor has detected any game. This is helpful when observing cold-blooded animals like snakes, or the process of flowering, etc.

Side PIR .	**On** ,Off	The default setting is **On**. The two side prep PIR sensors provide wider sensing angle and detect more potential triggers. In some situations, you only want to monitor a narrow spot. Too many irrelevant triggers by the side sensors outside of that spot will keep the camera on and off, which drains the battery power. In some situations, you may have difficulty removing the interfering branches, or avoiding the sunlight. If so, you have the option to turn off the side sensors. .
Default Setting	**No**，Yes	The default setting is No. It will reset all settings to default
Delete One	**NO/** Yes	Delete One Picture
Delete All	**NO/** Yes	Delete All Pictures
Slide Show		Auto Playback Pictures
Protect		The protected pictures will not be Deleted

3.2 File format

The camera stores photos and videos in the folder \DCIM\100MEDIA in the SD card. Photos are saved with filenames like PICT0001.JPG and videos like VIDO0001.AVI.

In the **TEST** mode, you can use the provided USB cable to download the files to a computer. (Select Mass Storage, Press Ok) You can also put the SD card to a SD card reader, plug it into a computer, and browse the files on the computer without downloading.

The AVI video files can be played back on most popular media players, such as Windows Media Player, QuickTime, etc.
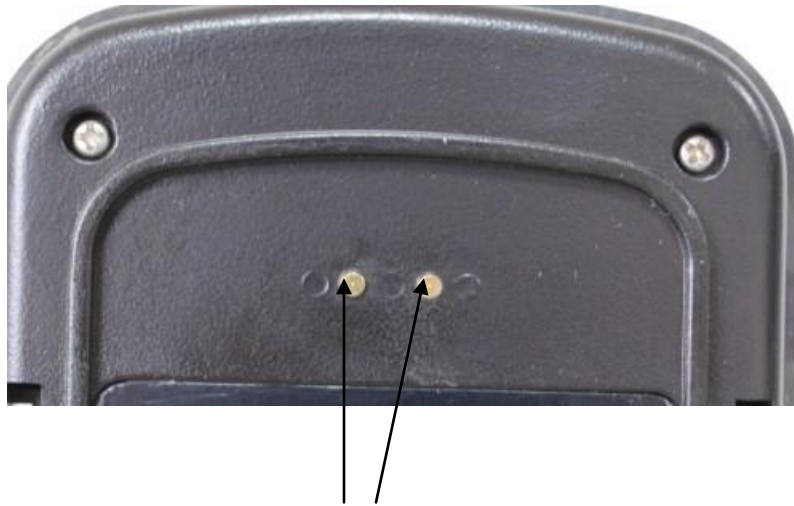
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GC-002 Camera

GC-002 - Additional Battery Box

4. Notes
4.1 Metal Poles

There are 2 electric poles on the back of camera and the additional battery box. Do not touch the electrodes with metal, or it could short circuit or damage the camera.

Don't touch with metal objects
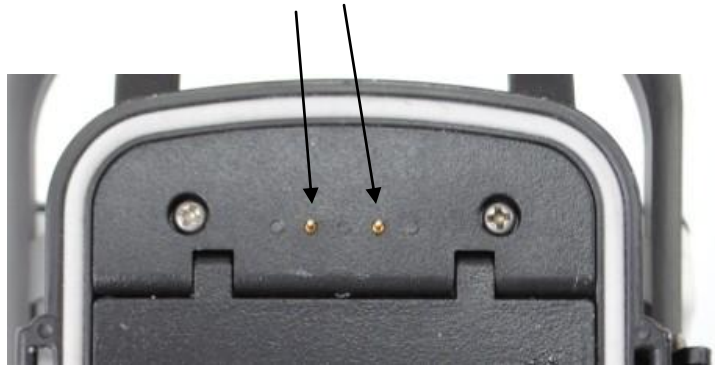
4.2 Power and Additional Battery Box

The working voltage is 6V in the camera body, additional battery box, and external power.

 Notice: Camera must be in the OFF position when the additional battery pack on the camera body, and locked, otherwise it will not work.

4.3 SD card

Because there are many kinds of SD card,We can only guarantee that most of the SD card can be used on the device. If bad photos are taken, please format the SD card with this camera.

4.4 Video Length and Battery Life

In order to lengthen the service life of the battery, it is strongly recommended to shoot videos with 8 alkaline batteries. It can shoot most segments of animals, the total period of number 2 ~ 3 times more than similar products. Pay attention in a cold environment; the capacity of the batteries will decline and the length of video will decrease accordingly.

4.5 850nm IR LED

This camera can fit 850nm IR LEDs

4.6 The Tripod

This camera can be fit onto a 1/4 inch tripod stud. Notice: When using a tripod, make sure the bottom camera cover and bolt-lock are fastened to prevent the lid from opening.

The Tripod

Lock

5. Limited Warranty

We take great pride in our products. We always stand behind our promises. We provide a leading warranty term and service. When buying a GC-002 product, you are covered under a limited warranty.

We guarantee our products to be free of defects in materials and workmanship for the original purchase date. This warranty does not cover consumer caused damages such as misuse, abuse, improper handling, installation, or repairs attempted by someone other than our authorized technicians.

We will, at our option during the warranty period, repair your camera or replace it with the same or comparable model free of charge. This warranty only extends to the original retail buyer from our authorized dealer. Purchase receipt or other proof of the date of the original purchase is required to receive warranty benefits. The warranty on any replacement product provided under the original warranty shall be for the remaining portion of the warranty period applicable to the original product.

This warranty extends solely to failures due to defects in materials or workmanship under normal use. It does not cover normal wear of the product.

If you need to return a GC-002 product under this warranty, please contact your dealer or our distributor.

Appendix I:

Technical Specification

Model	Parameters
Image Sensor	5 Mega Pixels Color CMOS
Max. Pixel Size	2560x1920
Lens	F=3.2; FOV=51°; Auto IR-Cut
IR Flash	65 Feet/20 Meters
LCD Screen	1-7/8" x 1-7/16"; (48mmx35.69mm)
Operation Keypad	480(RGB) x 234DOT; 16.7M Color　6 Keys
Memory	SD Card (8MB ~32GB)
Picture Size	12MP/8MP/**5MP**/3MP/1MP= **2560X1920**/4000X3000/ 3264 x 2448/2048 x 1536/1280X960;
Video Size	**1028 x 720，30fps**；720 x 480，30fps；640x480，30fps；　320x240，30fps
PIR Sensitivity	High/**Normal**/Low
PIR Sensing Distance	65ft/20m（Below 77°F/25°C at the Normal Level）
Prep PIR Sensing Angle	Left and right light beams form an angle of 100°; Each lens covers 10°
Main PIR Sensing Angle	20°
Trigger Time	1.2 Second (When using the 2G SD card)
Trigger Interval	0sec. - 60min; Programmable
Shooting Numbers	1, 2, 3 picture burst
Video Length	1-60 sec.; Programmable
Camera + Video	First takes a picture then video
Playback Zoom In	1~8 Times
Date Stamp	**Off，Date，Date/Time**；Include serial no., temperature and moon phase
Timer	On /**Off**; Time Set Programmable
Password	ON/**OFF**；4-Digit Numbers
Serial No.	4 digits and 26 alphabets set by yourself
Time Lapse	ON/**OFF**　1 Second ~ 24 Hours
Low Battery	Send"Battery Low"

Power Supply	4xAA; Expandable to 8xAA (With additional battery box)
External DC Power Supply	Plug Size: 4.0 x 1.7 6~12V(2~1A)
Stand-by Current	0.4mA
Stand-by Time	3～6 Months（4xAA～8xAA）
Auto Power Off	Auto power off in 2 minutes while no keypad controlling
Power Consumption	150mA (+230mA when IR LED lights up)
Low Battery Alarm	4.2~4.3V
Interface	TV out (NTSC); USB; SD Card Slot; 6V DC External
Mounting	Strap; Tripod Nail
Waterproof	IP54
Operation Temperature	-22~+158°F/-30 ~+70°C
Operation Humidity	5% ~ 95%
Certificate	FCC & CE & ROHS

Appendix II. Parts List

Part name	Quantity
Digital camera	1
Additional battery box	1
TV AV IN cable	1
USB cable	1
Strap	1
External DC cable (optional)	1
2G SD Card	1

Appendix III: Rear Battery Box Installation Instructions

Lock up

Screw in